



Australian Government

FBPOPR2041 Operate a mixing or blending and cooking process

Release: 1

FBPOPR2041 Operate a mixing or blending and cooking process

Modification History

Release	Comments
Release 1	This version released with FBP Food, Beverage and Pharmaceutical Training Package Version 1.0

Application

This unit of competency describes the skills and knowledge required to set up, operate, adjust and shut down a mixing or blending and cooking process.

This unit applies to individuals who work under general supervision and exercise limited autonomy in a food processing environment. It typically applies to the production worker responsible for applying basic operating principles to the operation and monitoring of a mixing or blending and cooking process and associated equipment.

All work must be carried out to comply with workplace procedures, in accordance with State/Territory work health and safety, and food safety regulations, legislation and standards that apply to the workplace.

No occupational licensing, legislative or certification requirements apply to this unit at the time of publication.

Pre-requisite Unit

Nil

Unit Sector

Operational (OPR)

Elements and Performance Criteria

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Prepare for work in mixing/blending and cooking processing area	1.1 Read or listen to work instructions from supervisor and clarify where needed 1.2 Confirm ingredients are available to meet operating requirements 1.3 Identify and confirm cleaning and maintenance requirements and

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
	status according to work health and safety and food safety requirements 1.4 Wear appropriate personal protective clothing and ensure correct fit
2. Prepare mixing/blending and cooking equipment and process for operation	2.1 Fit machine components and related attachments and adjust to meet operating requirements 2.2 Enter processing and operating parameters to meet safety and production requirements 2.3 Check equipment performance and adjust according to production requirements 2.4 Carry out pre-start checks according to work health and safety and operating procedures
3. Operate and monitor the mixing/blending and cooking process	3.1 Introduce ingredients and additives in the required quantities and sequence to meet recipe specifications 3.2 Start, operate and monitor the process for variation in operating conditions 3.3 Monitor the process to confirm that specifications are met 3.4 Identify, rectify and report out-of-specification equipment, product or process outcomes according to workplace requirements 3.5 Transfer mix to required production or storage location 3.6 Follow and apply workplace housekeeping and environmental procedures
4. Shut down the mixing/blending and cooking process	4.1 Identify the appropriate shutdown procedure 4.2 Shut down the process according to work health and safety and operating procedures 4.3 Identify and report maintenance requirements according to workplace procedures 4.4 Maintain workplace records according to workplace procedures

Foundation Skills

This section describes those language, literacy, numeracy and employment skills that are essential for performance in this unit of competency but are not explicit in the performance criteria.

Skill	Description
Reading	- Interpret workplace and standard operating procedures relevant to job role - Interpret production requirements
Writing	Record operating, routine maintenance and shutdown information on paper-based and electronic media
Numeracy	- Monitor and interpret production and process control indicators and data - Monitor supply and flow of materials to and from the process
Navigate the world of work	- Apply workplace procedures to own role and responsibilities - Identify skills, knowledge and experience required for performing own role in the workplace - Ask questions to clarify understanding or seek further information
Interact with others	- Communicate and report operational and safety information to relevant personnel - Use modes of communication suitable to purpose to confirm understanding when conducting operational start-up and shutdown procedures
Get the work done	- Access and interpret process control panels and system - Maintain a clean and hazard-free work area - Identify out-of-specification standards and maintain quality specifications - Confirm equipment status and condition - Interpret process and equipment information to monitor process and respond to abnormal performance and variations

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
FBPOPR2041 Operate a mixing or blending and cooking process	FDFOP2041A Operate a mixing or blending and cooking process	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volumes, including Implementation Guides, are available at VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=78b15323-cd38-483e-aad7-1159b570a5c4>

Assessment Requirements for FBPOPR2041 Operate a mixing or blending and cooking process

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Performance Evidence

An individual demonstrating competency in this unit must satisfy all of the elements and performance criteria of this unit.

There must be evidence that the individual has operated a mixing or blending and cooking process on at least one occasion, including:

- accessing workplace information to identify recipe requirements
- selecting, fitting and using personal protective clothing and/or equipment
- confirming supply of necessary materials and services
- conducting pre-start checks, including:
 - inspecting equipment condition to identify any signs of wear
 - selecting appropriate settings and/or related parameters
 - cancelling isolation or lock-outs
 - confirming that related equipment is clean and correctly configured for processing requirements
 - positioning sensors and controls correctly
 - ensuring any scheduled maintenance has been carried out
 - confirming that all safety guards are in place and operational
- sequencing ingredient addition to meet recipe specifications, including manual addition and/or operating bulk materials transfer and automatic addition equipment
- starting, monitoring and adjusting processing equipment to achieve required outcomes, including monitoring control points and conducting inspections to confirm process remains within specification, including:
 - time and temperature
 - agitation settings
 - weights
 - flow rates
 - flow diversion
 - characteristics of the mix, including colour, viscosity, density and consistency
- taking corrective action in response to out-of-specification results

- responding to and/or reporting equipment failure within level of responsibility
- locating emergency stop functions on equipment
- following isolation and lock-out/tag-out procedures to take process and related equipment off-line in preparation for cleaning and/or maintenance within level of responsibility
- completing workplace records
- maintaining work area to meet housekeeping standards
- using process control systems according to workplace procedures
- cleaning and sanitising equipment according to workplace procedures
- following relevant work health and safety procedures.

Knowledge Evidence

An individual must be able to demonstrate the knowledge required to perform the tasks outlined in the elements and performance criteria of this unit. This includes knowledge of:

- purpose and basic principles of heat sterilisation and effect on physical, chemical, microbiological and organoleptic characteristics of the cooked product
- the flow of the mixing or blending and cooking process and the effect of product output on downstream processes
- basic operating principles of equipment used in the mixing/blending and cooking process, including:
 - main equipment components
 - status and purpose of guards
 - equipment operating capacities and applications
 - the purpose and location of sensors and related feedback instrumentation
 - calibration schedules for scales and related weighing/measuring equipment
- services required mixing/blending and cooking process and action to take if services are not available
- quality characteristics and conditioning required of ingredients used, and their role in the product, including reconstituting dry ingredients and bringing ingredients to a required temperature
- effect of ingredient quality/condition on the process, including variables including temperature, viscosity/texture, microbial load and acidity quality
- heat treatment requirements for low and/or high acid foods as appropriate to production requirements
- stages and changes that occur during the blending and heat treatment stages
- quality requirements of the cooked product, including chemical, textural and flavour profiles
- relationship between time and temperature in the cooking process
- operating requirements and parameters and corrective action required where operation is outside specified operating parameters
- procedures for requisitioning, receiving and returning ingredients from stores
- typical equipment faults and related causes, including signs and symptoms of faulty equipment and early warning signs of potential problems

- common causes of variation in the mixing/blending and cooking process and corrective action required
- contamination/food safety issues associated with mixing and blending and related control measures
- work health and safety hazards and controls relevant to the mixing/blending and cooking process
- requirements of different shutdowns as appropriate to the process and workplace production requirements, including emergency and routine shutdowns, and procedures to follow in the event of a power outage
- isolation, lock-out and tag-out procedures and responsibilities required for the mixing/blending and cooking process
- procedures and responsibility for reporting production and performance information
- environmental issues and controls relevant to the process, including waste/rework collection and handling procedures related to the process
- basic operating principles of process control, including the relationship between control panels and systems and the physical equipment
- food safety requirements when preparing products
- packaging requirements and procedures
- cleaning and sanitation procedures required for the mixing/blending and cooking process.

Assessment Conditions

Assessment of skills must take place under the following conditions:

- physical conditions:
 - a workplace or an environment that accurately represents workplace conditions
- resources, equipment and materials:
 - personal protective clothing and equipment
 - mixing/blending and cooking process and related equipment and services
 - ingredients to be cooked
 - sampling schedules and test procedures and equipment
 - cleaning procedures, materials and equipment
- specifications:
 - work procedures, including advice on safe work practices, food safety, quality and environmental requirements
 - information on equipment capacity and operating parameters
 - production schedule/batch/recipe instructions
 - specifications, control points and operating parameters
 - documentation and recording requirements and procedures.

Assessors of this unit must satisfy the requirements for assessors in applicable vocational education and training legislation, frameworks and/or standards.

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